Missouri School Health Profiles 1994-2004

Department of Elementary and Secondary Education
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POLICIES AND PRACTICES

Change between 1995 & 2005 in percentage of student passengers who wore seat belts[7] : + 19

Change between 1994 & 2004 in percentage of health teachers who taught injury prevention: + 17

Introduction

Missouri's public schools have greatly improved their health policies, teaching, and programs since 1994.

In 2004, Missouri schools' implementation of almost all aspects of school health was above the national median.[1] Schools are requiring more health classes and are teaching more of the knowledge and skills students need to make healthy choices. Most schools have implemented basic policies to support student health and safety, to provide continuing professional development for health teachers, and to involve communities in school health programs. However, there are some causes for concern:

- Nine percent of schools do not require health education.
- Only 66 percent of schools have a policy protecting the rights of HIV-positive students and staff.
- Although most schools have health advisory councils, only 27 percent of lead health teachers report working with food services staff.
- Only 68 percent of health teachers provide families with information about their health education program.

Recommendations

Recommendations based on the findings of the 2004 Missouri School Health Profile include:

- Every secondary school should require at least one health course that includes HIV/AIDS prevention education, as mandated by the Missouri School Improvement Program.[2]
- Schools that do not have a written communicable disease policy should adopt one.
- Schools should make sure that their communicable disease policies include protection of the rights of HIV-positive students and staff. The Department's Policy Guidance on Communicable Diseases[3] can be found in Appendix B of this publication and in Appendix D.1 of the Manual for School Health Programs.[4]
- Schools should make sure that their health teachers receive the professional development necessary to provide quality education about such a rapidly changing subject. The Department of Elementary and Secondary Education, colleges and universities, and statewide professional organizations offer many professional development opportunities for health teachers.
- Schools should actively solicit broader representation and participation on health advisory councils. A health advisory council based on the coordinated school health model can ensure that all relevant staff within the school, as well as parents, the local health department, students, and religious organizations support the health education program.[5]
- Health teachers should inform parents of the upcoming content of health classes. Parents are more supportive of health education if they know what is being taught and have the opportunity to influence what is taught. Informed parents also can reinforce classroom lessons and bring knowledge of community resources to the school.[6]

Survey methods

The School Health Profile is a survey designed to monitor the status of health education, policies, and programs in public schools at the middle, junior, and senior high school levels. The survey is conducted in the spring of even-numbered years by the Missouri Department of Elementary and Secondary Education. The survey was first administered in 1994.

During the spring of 2004, questionnaires prepared by the federal Centers for Disease Control and Prevention (CDC) Division of Adolescent and School Health were sent to the principal and a designated lead health education teacher in 436 secondary schools in the state. Systemic equal probability sampling with a random start was used to select schools from all regular secondary public schools having at least one of the grades 6 through 12. Usable questionnaires were received from 353 principals and 331 teachers, representing about one-fourth of all secondary schools.

The results from the questionnaires were weighted to permit generalization from the samples of 353 or 331 to the larger population of principals and lead health education teachers of schools with any of grades 6 through 12 in Missouri in the spring of 2004. The responses are representative of secondary principals and health education teachers in Missouri public schools and results may be used to develop policies and improve programs for school health education.

Survey results were compiled in the following categories: (1) overall results for all schools, (2) middle school results for schools comprised primarily of grades 6–8, (3) junior/senior high schools results for schools comprised primarily of grades 7–12, and (4) senior high school results for schools comprised primarily of grades 9–12. Not all data are reported in this publication. Key findings and significant changes are reported and discussed.

Acknowledgements

The Missouri Department of Elementary and Secondary Education extends sincere appreciation to Bill Datema and Janet Wilson for administering the early surveys. They laid the foundation for the long-term monitoring of trends in health education in Missouri's public schools. Thanks is also extended to the Centers for Disease Control and Prevention's Division of Adolescent and School Health and to Westat, Inc. for the expertise and support they provided with data collection, analysis, and reporting.

School support for student health and safety

Table 1. Percentage of Missouri secondary schools with policies that support health education, 1994 – 2004

	1994	1996	1998	2000	2002	2004
Require health education in any of grades 6 through 12	NA	84	80	87	92	91
Have designated coordinator of health education	71	90	97	98	97	97
Health education teacher	NA	34	31	41	35	42
District curriculum coordinator	21	6	18	17	27	23
School administrator	NA	20	25	21	15	15
District administrator	NA	6	3	11	13	9
Other	16	18	4	4	7	5
Have written policy protecting rights of students and staff with HIV/AIDS	NA	78	72	55	69	66
Have school health advisory council	46	41	37	54	55	61

NA—Not Available

Table 2. Percentage of Missouri secondary schools with policies that support physical education, 2002 – 2004

	2002	2004
Require physical education in any of grades 6 through 12	100	100
Permit youth to use school for community-sponsored sports teams or physical activity programs	93	88
Offer intramural activities or physical activity clubs	60	62
Provide transportation home for students who participate in after-school intramural or physical activities	20	30

Table 3. Violence prevention programs in secondary schools, Missouri, 2000 – 2004

	2000	2002	2004
Violence response plan	96	98	98
Peer mediation	49	52	47
Bullying prevention	38	40	47
Gang violence prevention	25	21	21
Safe passage to school	10	8	7

Administrators affect students' health through school policies.

Student's health can be improved through policies that promote health and physical education in a healthy school environment, that provide adequate training for teachers, and that build support through community involvement in shaping policies and curricula.

Health education

School administrators are responsible for ensuring that their schools meet minimum state requirements. The Missouri Department of Elementary and Secondary Education requires health education in all public schools, including, specifically, HIV/AIDS prevention education at every grade level.[2] Nine percent of the schools report not meeting this requirement (Table 1).

Physical education

All schools require physical education and most provide students the opportunity to participate in physical activities outside of the regular school day (Table 2).

Advisory councils

School health advisory councils not only elicit support for health education from the community, they also facilitate access to community resources.[5,8 – 11] The percentage of schools with a health advisory council reached its highest level ever, but is still only 61 percent (Table 1).

Rights of HIV-positive persons

The Missouri School Improvement Program requires the adoption of a written policy on communicable diseases, and such a policy should protect the rights of students or staff with HIV infection or AIDS. The percentage of schools with a written policy protecting the rights of students or staff with HIV infection or AIDS is significantly lower than in 1996 (Table 1).

Violence prevention

Most schools have a violence response plan, but only 47 percent have peer mediation programs, and only 47 percent have a program that addresses bullying (Table 3).

Table 4. Asthma management activities in secondary schools, Missouri, 2002 – 2004

	2002	2004
Encourage full participation in p.e. and physical activity when students with asthma are doing well	97	99
Identify and track all students with asthma	93	94
Assure immediate access to medications as prescribed by a physician and approved by parents	91	94
Provide modified p.e. and physical activities as indicated by the student's Asthma Action Plan	95	86
Provide a full-time registered nurse all day, every day	72	73
Obtain and use an Asthma Action Plan for all students with asthma	64	67
Educate students with asthma about asthma management	56	64
Educate school staff about asthma	60	63
Provide intensive case management for students with asthma who are absent 10 or more days per year	38	41
Teach asthma awareness to all students in at least one grade	32	32

Table 5. Tobacco control policies in secondary schools, Missouri, 2000 – 2004

	2000	2002	2004
Prohibit student cigarette smoking			
in buildings	100	100	99
on grounds	99	99	99
in buses	100	99	99
at off-campus, school-sponsored events	96	97	97
Prohibit student use of			
smokeless tobacco	93	98	97
cigars	90	97	95
pipes	89	97	95
Prohibit tobacco advertising			
in buildings	94	93	95
on grounds	94	92	94
in school publications	93	92	94
in buses	94	93	93
Prohibit students from wearing tobacco brand-name clothing or carrying merchandise with tobacco company names, logos, or cartoon characters	92	93	94
Prohibit tobacco advertising through sponsorship of school events	89	90	90
Prohibit faculty and staff use of			
cigarettes	75	83	79
cigars	70	82	78
pipes	70	81	78
smokeless tobacco	70	82	77
Prohibit visitor use of			
cigarettes	NA	81	76
cigars	NA	79	73
pipes	NA	79	73
smokeless tobacco	NA	75	70

NA—Not Available

Health services

The Missouri School Improvement Plan requires public schools to implement a health services plan,[2] which is usually the responsibility of the school nurse. Nine of the 524 districts do not meet this requirement,[12] and Missouri's ratio of 1 registered nurse to 794 students is higher than the 1-to-750 ratio recommended by the National Association of School Nurses.[13] As the number of students with chronic problems such as asthma increases, school health services become more important than ever. Table 4 shows the extent of asthma management activities in secondary schools.

Tobacco use prevention

Almost all schools prohibit student cigarette smoking, and a high percentage prohibits students from using other forms of tobacco. More than 20 percent of schools still permit faculty, staff, and visitors to use tobacco (Table 5).

Nutrition

Administrators face the challenge of reconciling some school policies and activities—such as the sale of soft drinks—with good nutrition for students. Schools' nutrition policies should reinforce nutrition education and complement school food services programs,[14] but most schools have some policies that undermine efforts to promote healthy eating (Table 6). The federal Child Nutrition and WIC Reauthorization Act of 2004 requires each school district that participates in a program under the National School Lunch Act to establish a local wellness policy for each school in the district by the beginning of the 2006 – 2007 school year. Policy guidance available to all districts from the Missouri School Boards Association can help schools improve their food service programs.[15]

Change between 1994 and 2002 in percentage of lead health education teachers who taught tobacco prevention: +8

Table 6. Nutrition policies in secondary schools, Missouri, 2002 – 2004

	2002	2004
Snack foods or beverages are available from vending machines or snack bar	90	90
bottled water	86	90
100% fruit juice	79	76
salty snacks such as potato chips	77	76
low-fat salty snacks, such as pretzels	74	76
chocolate candy	70	69
other candy	70	71
low-fat baked goods	57	57
fruits or vegetables	30	33
Students can purchase snack foods or beverages		
during school lunch periods	72	69
before classes begin in the morning	72	69
during any school hours when meals are not being served	36	38
Students have at least 20 minutes for lunch after they are seated	63	65

Table 7. Topics on which lead health education teachers wanted and received in-service training, Missouri, 1994 – 2004

Percentage of respondents who received training*/Percentage of respondents who wanted training

	1994	1996	1998	2000	2002	2004
CPR	NA	51/**45**	55/**35**	68/**68**	68/**68**	70/**69**
First aid	NA	33/**47**	39/**40**	55/**67**	57/**70**	60/**71**
Violence prevention	12/**49**	36/**56**	33/**43**	55/**77**	51/**72**	47/**72**
Alcohol or other drug use prevention	41/**42**	41/**54**	36/**44**	61/**66**	44/**68**	43/**71**
HIV prevention	44/**48**	34/**67**	28/**50**	38/**65**	31/**62**	36/**64**
Nutrition and dietary behavior	12/**30**	22/**44**	27/**39**	31/**63**	33/**63**	36/**64**
STD prevention	18/**34**	24/**55**	22/**48**	32/**62**	30/**60**	32/**62**
Tobacco use prevention	21/**30**	22/**44**	26/**44**	36/**60**	33/**57**	31/**64**
Pregnancy prevention	12/**38**	10/**46**	19/**39**	24/**55**	22/**55**	22/**57**
Suicide prevention	11/**44**	11/**62**	11/**58**	7/**68**	23/**66**	21/**70**

NA—Not Available *in preceding two years

Table 8. Major emphasis of professional preparation of lead health education teachers, Missouri, 1994 – 2004

	1994	1996	1998	2000	2002	2004
Health and physical education	NA	40	42	50	47	57
Physical education only	62	31	22	18	25	17
Family life education or life skills	15	14	14	NA	14	11
Other	6	3	3	3	6	6
Science	6	4	5	4	3	4
Health education only	6	2	3	3	3	2
Nursing	4	2	5	2	2	2
Counseling	2	0	1	1	0	1

NA—Not Available

Change between 1995 and 2003 in percentage of high school students who regularly smoked cigarettes:[7] -19

Professional preparation

The degree to which a professional trained in health education coordinates a program is one measure of effective health education.[16] Almost all schools have a designated health education coordinator, but only 42 percent of the coordinators are health teachers (Table 1).

Continuing education is another indicator of the quality of school health education.[5,8,17,18] The percentage of lead health education teachers able to attend professional development increased modestly until 2002, but declined slightly by 2004 (Table 7).

Effective health education is linked to teacher training and is aided by the use of teachers who have health education as a primary responsibility.[8,16,17] Certification as a health educator typically requires specific training in college and continuing education. Participation in continuing education may indicate the school's level of support for health education.

The major academic preparation of lead health education teachers in Missouri is most frequently health and physical education followed by physical education only (Table 8). Fifty-seven percent have been teaching health for more than five years (87 percent in 1994, 61 percent in 1996, 56 percent in 1998, 58 percent in 2000, and 56 percent in 2002). The percentage of teachers receiving in-service training has risen over ten years, but opportunities for professional development have never kept pace with need (Table 7).

Table 9. Grades in which health education is required, Missouri, 1994 – 2004

	1994	1996	1998	2000	2002	2004
6th	31	56	64	63	74	68
7th	52	76	78	83	86	85
8th	51	59	74	78	86	80
9th	27	49	61	68	86	82
10th	30	56	60	36	25	31
11th	9	24	32	16	17	20
12th	8	22	31	16	15	20

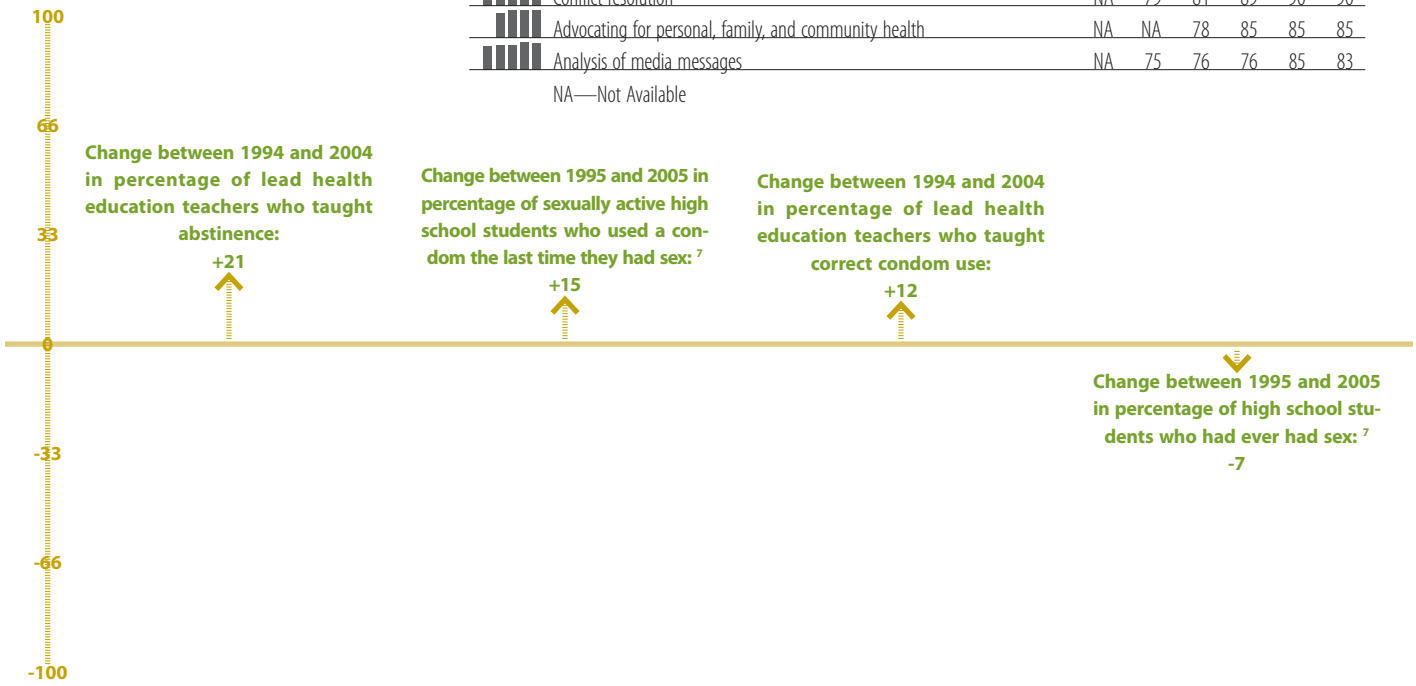
Table 10. Number of separate health education courses required in grades 6 – 12, Missouri, 1994 – 2004

	1994	1996	1998	2000	2002	2004
1 course	50	44	48	40	42	42
2 courses	10	22	23	23	24	22
3 courses	4	13	15	22	19	24
4 courses	2	1	3	7	9	6
none	33	18	10	8	6	8

Table 11. Skills taught in required health education courses in secondary schools, Missouri, 1994 – 2004

	1994	1996	1998	2000	2002	2004
Decision making	NA	98	96	99	97	99
Resisting peer pressure	NA	97	95	98	98	97
Goal setting	NA	89	91	95	94	95
Communication	NA	87	88	93	93	93
Stress management	NA	88	97	95	92	92
Accessing health information, products, and services	NA	NA	81	85	90	91
Conflict resolution	NA	79	81	89	90	90
Advocating for personal, family, and community health	NA	NA	78	85	85	85
Analysis of media messages	NA	75	76	76	85	83

NA—Not Available



Instruction

Table 12. Topics taught in required health courses in secondary schools, Missouri, 1994 – 2004

	1994	1996	1998	2000	2002	2004
Nutrition and dietary behavior	79	98	93	95	100	99
Physical activity and fitness	79	98	94	95	100	99
Tobacco use prevention	91	97	99	99	99	99
Alcohol or other drug use prevention	96	100	99	100	99	98
HIV prevention	86	94	96	96	96	98
Accident or injury prevention	78	89	87	95	94	95
Emotional and mental health	NA	91	90	95	94	94
Growth and development	NA	90	89	93	92	93
STD prevention	78	94	91	90	90	93
Consumer health	NA	85	80	85	88	90
First aid	NA	88	82	86	86	88
Violence prevention	40	85	85	82	85	87
Human sexuality	78	90	84	84	84	86
Pregnancy prevention	66	85	84	82	82	86
Dental and oral health	NA	78	71	75	77	78
Environmental health	NA	75	71	71	78	77
Suicide prevention	57	75	70	73	74	74
CPR	NA	75	69	71	73	73
Death and dying	NA	59	55	58	62	64

NA—Not Available

Table 13. Physical activity topics taught in required health courses in secondary schools, Missouri, 2002 – 2004

	2002	2004
How much physical activity is enough	88	98
The physical, psychological, or social benefits of physical activity	96	95
Health-related fitness	93	94
Decreasing sedentary activities such as television watching	90	91
Phases of a workout	91	89
Dangers of using performance-enhancing drugs, such as steroids	90	89
Preventing injury during physical activity	89	89
Weather-related safety	90	85
Opportunities for physical activity in the community	80	79
Overcoming barriers to physical activity	74	78
Developing an individualized physical activity plan	75	75
Monitoring progress toward reaching goals in an individualized physical activity plan	72	70

Amount of instruction

Although students' knowledge can be improved with approximately 10 hours of instruction, acquiring the skills needed to practice healthy behaviors requires approximately 40 to 50 hours of instruction each year for several consecutive school years.[17,18,19,20] Since 1994 this survey has documented an encouraging trend toward requiring health classes in consecutive years (Tables 9, 10).

Research indicates that providing only factual information about health-related topics does not influence student behavior.[21] A high percentage of teachers again reported teaching a variety of skills in health education courses (Table 11). Schools are to be commended for continuing to teach skills that prepare students to make responsible decisions about their health.

Methods of instruction

Research also indicates that involving students in decisions about programs and in presenting positive messages to their peers is an effective instructional tool.[22] Peer educators may address attitudes and model behaviors in a manner that is more acceptable to students. The percentage of schools that report using trained peer educators to teach about health has more than doubled (28 percent in 1998, 66 percent in 2004).

Table 14. HIV and AIDS topics taught in required health courses in secondary schools, Missouri, 1994 – 2004

	1994	1996	1998	2000	2002	2004
Abstinence as the most effective way to avoid HIV	74	96	92	94	96	95
How HIV is and is not transmitted	NA	100	94	95	94	95
How HIV affects the human body	NA	NA	NA	94	92	94
Influence of alcohol/drugs on HIV infection risk behaviors	68	91	87	89	93	91
The number of young people who get HIV	NA	NA	NA	85	80	84
Social or cultural influences on HIV-related risk behaviors	41	84	77	83	83	83
Information on HIV testing and counseling	36	77	68	79	78	76
Compassion and support for persons with HIV/AIDS	33	77	67	81	76	75
Condom efficacy	52	75	66	66	68	69
Correct use of condoms	20	41	30	28	28	32

NA—Not Available

Table 15. Nutrition & dietary topics taught in required health courses in secondary schools, Missouri, 2002 – 2004

	2002	2004
The benefits of healthy eating	98	98
Aiming for a healthy weight	96	98
Choosing a variety of fruits and vegetables daily	95	97
The Food Guide Pyramid	98	97
Using food labels	96	96
Risks of unhealthy weight control practices	94	96
Choosing a diet low in saturated fat and cholesterol and moderate in total fat	94	96
Choosing a variety of grains daily, especially whole grains	93	95
Moderating intake of sugars	94	94
Eating disorders	95	92
Accepting body size differences	90	90
Preparing healthy meals and snacks	90	89
Eating more calcium-rich foods	88	87
Choosing and preparing foods with less salt	83	86
Keeping food safe to eat	84	83

Table 16. Tobacco prevention topics taught in required health courses in secondary schools, Missouri, 2000 – 2004

	2000	2002	2004
Short- and long-term health consequences of cigarette smoking	98	97	98
Benefits of not smoking cigarettes	99	96	98
Addictive effects of nicotine in tobacco products	99	95	97
The health effects of second-hand smoke	NA	94	97
Short- and long-term health consequences of smokeless tobacco	98	95	96
The number of illnesses and deaths related to tobacco use	95	94	96
How to say no to tobacco use	NA	94	96
Benefits of not using smokeless tobacco	96	91	96
Influence of the media on tobacco use	95	92	95
Influence of families on tobacco use	93	91	93
How many young people use tobacco	90	92	93
Risks of cigar or pipe smoking	90	89	93
How students can influence or support others to prevent tobacco use	89	88	91
How students can influence or support others in efforts to quit using tobacco	87	88	90
Social or cultural influences on tobacco use	90	92	89
Making a personal commitment not to use tobacco	70	73	75
How to find valid information or services related to prevention or cessation of tobacco use	72	67	78

NA—Not Available

Content of instruction

More teachers are presenting more health topics in required health classes than a decade ago. Prevention of alcohol, tobacco, and other drug use consistently have been the topics taught most. Dental health, environmental health, suicide prevention, CPR, and death and dying have remained the topics taught least. Of particular note is that teaching violence prevention has more than doubled since 1994 (Table 12). The teaching of physical activity topics in required health classes remained near the levels of 2002 (Table 13).

The percentage of lead health education teachers who teach about HIV infection and AIDS as part of a required health education course in any of grades 6 through 12 remained high (Table 12). The amount of basic HIV/AIDS education, as well as such prevention topics as sexual behaviors that transmit HIV, condom use, and reasons for choosing sexual abstinence remained essential the same as in 2002 (Table 14).

There were no significant changes how many teachers taught particular topics about nutrition, diet, and tobacco prevention (Tables 15,16).

Coordination of school health activities

Table 17. Strategies used by lead health teachers to involve others in health education, Missouri, 1994 – 2004

	1994	1996	1998	2000	2002	2004
Provided families with information on the health education program	NA	NA	NA	66	73	68
Collaborated with other school health personnel						
Physical education staff	38	70	64	81	88	82
School health services staff	18	55	63	81	82	79
School mental health or social services staff	23	56	48	57	59	58
Community members	NA	NA	NA	52	50	46
Food service staff	6	18	15	25	27	27
Invited parents to attend health education class	19	33	31	30	30	30
Met with parents' organization, such as PTA, to discuss the health education program	NA	NA	NA	18	21	17

NA—Not Available

Table 18. Secondary school courses other than health in which required HIV prevention and tobacco prevention are taught, Missouri, 2002 – 2004

	2002	2004
HIV prevention		
Family and consumer sciences	50	51
Physical education	40	45
Family life education or life skills	45	40
Science	39	39
Special education	21	25
Tobacco use prevention		
Physical education	57	55
Family and consumer sciences	49	49
Family life education or life skills	46	37
Science	35	33
Special education	27	28

The involvement of the community is necessary for successful health education.[5,8,9,10]

What is taught at school must be reinforced outside of the classroom if healthy behaviors are to be promoted and risky behaviors prevented. In addition, parents and communities are more supportive of health education if they know what is being taught and have the opportunity to influence what is taught. National studies have shown that parents are very supportive of health education, including sex education,[22,23] and the responses of principals to this survey suggest similar support exists in Missouri. Ninety-six percent of principals report that less than 1 percent of students are excused from any part of health education at parental request.

Sixty-one percent of schools involve their communities in health education with health advisory councils (Table 1). The effectiveness of health education can be enhanced if health teachers work cooperatively with other teachers and with other school staff who influence school health.[5] Health teachers report working most with physical education teachers and least with food service staff (Table 17).

Schools have made great progress in coordinating health education and other health programs. A substantial minority of schools infuse health into other curricular areas, a practice that cannot replace required health education, but can reinforce and extend it[5,8] (Table 18).

Appendix A

Policy guidance on communicable diseases

The continuing expansion of medical knowledge about communicable diseases and expanding statutory and case law on the rights of individuals who may have the diseases make it imperative that local boards of education routinely review their policies and procedures for dealing with communicable diseases to make sure they are both legal and effective.

The State Board of Education periodically reviews and updates its policy guidance on communicable diseases and distributes the revised document to public schools. The policy guidance was last revised in November 1995. Throughout the document, reference is made to *Infection Control Procedures for Schools*, published by the Missouri Department of Health and Senior Services (see Appendix C).

The State Board of Education recommends that all local boards of education review their policies and procedures and make adjustments where necessary. The policy guidance was approved by the Missouri State Board of Education in October 1987, and revised in October 1988, June 1989, and November 1995.

COMMUNICABLE DISEASE—STUDENT

Purpose
The school board recognizes its responsibility to protect the health of students and employees from the risks posed by infectious diseases. The board also has the responsibility to uphold the rights of affected individuals to privacy and confidentiality, to attend school, and to be treated in a nondiscriminatory manner.

Immunization
Students cannot enroll and/or attend school unless immunized as required by Missouri law.

Universal Precautions
The district requires all staff to routinely observe universal precautions to prevent exposure to disease-causing organisms, and the district shall provide necessary equipment/supplies to implement universal precautions.

Categories of Potential Risk
Students with infectious diseases that can be transmissible in school and/or athletic settings (such as, but not limited to, chicken pox, influenza, and conjunctivitis) should be managed as specified in: a) the most current edition of the Missouri Department of Health and Senior Services document entitled: *Prevention and Control of Communicable Diseases: A Guide for School Administrators, Nurses, Teachers, and Day Care Operators*, b) the documents referenced in 19 CSR 20-20.030, and c) in accordance with any specific guidelines/recommendations or requirements promulgated by the local county or city health departments.

A student infected with a blood-borne pathogen such as hepatitis B virus (HBV), hepatitis C virus (HCV), or human immunodeficiency virus (HIV) poses no risk of transmission through casual contact to other persons in a school setting. Students infected with one of these viruses shall be allowed to attend school without any restrictions which are based solely on the infection. The district cannot require any medical evaluation or tests for such diseases.

Exceptional Situations: There are specific types of behaviors (for example, biting or scratching) or conditions (for example, frequent bleeding episodes or uncoverable, oozing skin lesions) which could potentially be associated with transmission of both blood-borne and non blood-borne pathogens. No student, regardless of whether he or she is known to be infected with such pathogens, should be allowed to attend school unless these behaviors or conditions are either absent or appropriately controlled in a way that avoids unnecessary exposure.

In these exceptional instances, an alternative educational setting may be warranted. In certain instances, a designated school administrator may want to convene a review committee. The number of persons on the review committee should be limited. It is recommended that members be limited to: 1) parent(s)/guardian(s), 2) medical personnel (student's physician, the school nurse), 3) building administrator, 4) superintendent and/or designee. Local health department officials may be consulted and/or included as members of the review team. If the student is identified as having a disability, any change of placement would need to be effected through the Individualized Education Plan (IEP) process. In the case of a student who is disabled, but not identified under the Individuals with Disabilities Education Act (IDEA), any change of placement would need to be effected through a multidisciplinary team meeting.

Specific mechanisms should be in place to ensure the following are consistently done:

1. All episodes of biting, and all children who exhibit repeated instances of significant aggressive behavior, should be reported to the designated school administrator.
2. The school nurse, and the designated school administrator when appropriate, should be informed of any child who has recurrent episodes of bleeding or who has uncoverable, oozing skin lesions.

3. The school nurse, and the designated school administrator when appropriate, should be promptly informed of any child with an illness characterized by a rash.

4. The school nurse, and designated school administrator when appropriate, should be informed promptly of any instance in which the significant potential for disease transmission occurs.

Confidentiality
The superintendent or designee shall ensure the student's confidentiality rights are strictly observed in accordance with law: Missouri law, Section 191.689 RSMo, 1994 identified two groups of people within a school system who could be informed of the identity of a student with HIV infection on a "need to know" basis. They are:

1. Those designated by the school district to determine the fitness of an individual to attend school (see recommended review committee membership listed above); and

2. Those who have a reasonable need to know the identity of the child in order to provide proper health care.

Examples of people who need to know are: school nurse, review team members, and IEP team if applicable. Security of medical records shall be maintained. Breach of confidentiality may result in disciplinary action, a civil suit, and/or violation of the federal Family Rights and Privacy Act (FERPA).

Education—Student
All students should receive age-appropriate education about the prevention and control of communicable diseases, to include the use of universal precautions. Instruction should be incorporated within a comprehensive school health curriculum in grades K-12 as stated in the Missouri School Improvement Program Standards.

Reporting and Disease Outbreak Control
Reporting and disease outbreak control measures will be implemented in accordance with state and local laws and Department of Health and Senior Services' rules governing the control of communicable diseases dangerous to public health, and any applicable rules promulgated by the appropriate county or city health department.

Notification
Superintendents who supply a copy of a board-approved policy that contains provisions substantially similar to this guideline to the Department of Health and Senior Services (DHSS) shall be entitled to confidential notice of the identity of any district child reported to the department as HIV-infected and known to be enrolled in the district – whether in a public or private school (DHSS cannot comply with this provision.) The parent(s)/guardian(s) are also required to provide such notice to the superintendent.

Review
Districts should periodically review their policies and procedures and make revisions when necessary.

Approved: October 1987 Revised: October 1988, June 1989, November 1995

Legal Refs: Sections 167.191, 191.650 – .730 RSMo
Americans with Disabilities Act (42 U.S.C. 12101 et seq.)

PL 94 – 142 Individuals with Disabilities Education Act of 1973 (20 U.S.C. 1400 et seq.)
PL 92 – 112, Section 504 of the Rehabilitation Act of 1973
19 CSR 20.20.010 through 20.20.060 and 20.28.010

COMMUNICABLE DISEASE—EMPLOYEE

Purpose
The school board recognizes its responsibility to protect the health of students and employees from the risks posed by infectious diseases. The board also has the responsibility to uphold the rights of affected individuals to privacy and confidentiality, to continue their employment, and to be treated in a nondiscriminatory manner.

Universal Precautions
The district requires all staff to routinely observe universal precautions to prevent exposure to disease-causing organisms, and the district shall provide necessary equipment/supplies to implement universal precautions.

Categories of Potential Risk
Employees with infectious diseases that can be transmissible in school and/or athletic settings (such as, but not limited to, chicken pox, influenza, and conjunctivitis) should be managed as specified in: a) the most current edition of the Missouri Department of Health document entitled: Prevention and Control of Communicable Diseases: A Guide for School Administrators, Nurses, Teachers, and Day Care Operators and b) the documents referenced in 19 CSR 20-20.030 and c) in accordance with any specific guidelines/recommendations or requirements promulgated by the local county or city health department. A medical release may be required of the employee in certain circumstances.

An employee infected with a blood-borne pathogen such as hepatitis B virus (HBV), hepatitis C virus (HCV), or human immunodeficiency virus (HIV) poses no risk of transmission through casual contact to other persons in a school setting. Employees infected with one of these viruses shall be allowed to continue work without any restrictions which are based solely on the infection.

> **Exceptional Situations:** There are certain specific conditions (for example, frequent bleeding episodes or uncoverable, oozing skin lesions) which could potentially be associated with transmission of both blood-borne and non blood-borne pathogens. No employee, regardless of whether he or she is known to be infected with such pathogens, should be allowed to continue work unless these conditions are either absent or appropriately controlled in a way that avoids unnecessary exposure.

Specific mechanisms should be in place to ensure the following are consistently done:

1. The school nurse, and the designated school administrator when appropriate, should be informed of any staff member who has recurrent episodes of bleeding or who has uncoverable, oozing skin lesions.
2. The school nurse, and the designated school administrator when appropriate, should be promptly informed of any employee with an illness characterized by a rash.
3. The school nurse, and designated school administrator when appropriate, should be informed promptly of any instance in which the significant potential for disease transmission occurs.

Confidentiality
The superintendent or designee shall ensure the employee's confidentiality rights are strictly observed in accordance with law. Security of medical records shall be maintained. Breach of confidentiality may result in disciplinary action, and/or a civil suit.

Training—Employee
All employees should receive training annually on universal precautions and the Communicable Disease Policy.

Testing—Employee
Requiring medical evaluations or tests of employees will not normally be authorized under the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act. Schools may require post-offer, preemployment, or annual physical examinations if the exam is job-related and if conducted on all employees or applicants for similar positions. Requiring medical evaluations or tests for infection with blood-borne pathogens is not allowed by law.

Reasonable Accommodations
Districts should develop procedures to respond to employee requests for reasonable accommodations when an employee has a disability as defined by Section 504 and/or the ADA.

Reporting and Disease Outbreak Control
Reporting and disease outbreak control measures will be implemented in accordance with state and local laws and Department of Health and Senior Services' rules governing the control of communicable diseases dangerous to public health, and any applicable rules promulgated by the appropriate county or city health department.

Review
Districts should periodically review their policies and procedures and make revisions when necessary.

Approved: October 1987 Revised: October 1988, June 1989, November 1995

Legal Refs: Sections 167.191, 191.650-.730 RSMo
Americans with Disabilities Act (42 U.S.C. 12101 et seq.)
PL 94-142 Individuals with Disabilities Education Act of 1973 (20 U.S.C. 1400 et seq.)
PL 92-112, Section 504 of the Rehabilitation Act of 1973
19 CSR 20-20.010 through 20.20.060 and 20.28.010

Appendix B Infection control procedures for schools

General Procedures for Preventing Transmission of Infectious Diseases in School Settings

Having direct contact with the body fluids of another person can potentially provide the means by which many different infectious diseases can spread. Some examples of body fluids which transmit infection, and some of the diseases that can result, include the following:

Body Fluid	Diseases Spread Through Contact with this Body Fluid
Eye discharge	Conjunctivitis (pink eye)
Nose or throat discharge	Colds, influenza, parvovirus B19 (Fifth's disease)
Blood	Hepatitis B, C, HIV
Feces	Hepatitis A, shigellosis, giardiasis
Urine	Cytomegalovirus

It is important to remember that any person could potentially have disease-causing organisms in their body fluids, even if they have no signs or symptoms of illness. Consequently, the following recommendations should be followed in **all** situations, not just those involving an individual known to have an infectious disease.

In the school setting, it is recommended that reasonable steps be taken to prevent individuals from having direct skin or mucous membrane contact with any moist body fluid from another person. Specifically, **direct contact should be avoided** with all the following:

1. Blood (preventing exposure to blood or blood-contaminated body fluids is discussed in more detail in the following section on standard precautions);
2. All other body fluids, secretions, and excretions regardless of whether or not they contain visible blood;
3. Non-intact skin (any area where the skin surface is not intact, such as moist skin sores, ulcers or open cuts in the skin); and
4. Mucous membranes.

If hands or other skin surfaces are contaminated with body fluids from another person, washing with soap and water should take place as soon as possible.

In general, standard medical vinyl or latex gloves should be worn whenever the possibility of direct contact with any body fluid with another person is anticipated. Gloves should be available and easily accessible in any setting where contact with body fluids could take place. Hands should always be washed immediately after removal of gloves. Pocket masks or other devices for mouth-to-mouth resuscitation should be available.

Mucous membranes cover the eyes and the inside of the nose and mouth, along with certain other parts of the body. In a school setting, avoiding mucous membrane contact with body fluids means, for practical purposes, that one does not get these fluids in one's eyes, nose or mouth. This can generally be accomplished by not rubbing the eyes with one's hands, and not putting the hands or anything touched by unwashed hands (such as food) in one's mouth. Good handwashing is vital to preventing mucous membrane exposure to disease-causing organisms. Additional steps to reduce the risk of transmission of communicable diseases in the school setting include the following:

1. Toilet tissue, liquid soap dispenser, and disposable towels should always be available in all

restrooms. All children should be taught proper handwashing and encouraged to practice this after using the restroom.

2. All children should wash their hands, with direct supervision as necessary, before eating.

3. Children should be discouraged from sharing food, personal grooming items, and cosmetics.

4. Younger children should be discouraged from placing others' fingers in their mouths, or their own fingers in the mouths of others, and from mouthing objects that others might use.

5. Proper sanitation procedures must be followed with regard to food handling and preparation, control of insects and rodents, and proper disposal of solid waste.

Standard Precautions

Standard Precautions (formerly universal precautions) is the term now used to acknowledge that any person's body fluids, including blood, may be infectious, and includes the need to use personal protective devices such as gloves, masks or clothing to prevent exposure to body substances. These precautions include:

- Wearing disposable gloves for contact or anticipated contact with any person's blood or body fluids;
- Wearing protective gown/apron if soiling of clothes is likely;
- Wearing goggles and/or mask as appropriate when splashing of blood/bloody fluids is likely; and
- Always washing hands after removing gloves or when hands have come in contact with blood or any body fluid/excretion.

In addition:

1. If any body fluids come into contact with the mucous membrane surfaces of the nose or mouth, the area should be immediately flushed with water. If the mucous membrane surfaces of the eye are contaminated, there should be irrigation with clean water, or with saline solution or sterile irrigants designed for this purpose.

2. Precautions should be taken to avoid injuries with sharp instruments contaminated with blood. Needles should not be recapped, purposely bent or broken by hand, removed from disposable syringes, or otherwise manipulated by hand. After they are used, disposable syringes and needles, and other sharp items should be placed in puncture-resistant, leak-proof containers for disposal; the puncture-resistant containers should be located as close as practical to the use area. School districts should have a clear procedure for sharps usage and disposal.

3. Persons providing health care who have exudative skin lesions or weeping dermatitis should refrain from all direct patient care, and from handling patient-care equipment, until the condition resolves.

The Missouri Code of State Regulations, 19 CSR 20-20.092, promulgated under the authority of Section 191.640 RSMo, requires that "the blood-borne pathogen standard governing public employers in the state of Missouri having employees with occupational exposure to blood or other potentially infectious materials shall be the standard of the Occupational Safety and Health Administration as codified in 29 CFR 1910.1030. The rule establishes the current standard of practice with regard to the prevention of transmission of infectious blood-borne agents in occupational settings, and it contains good public health and risk management policies. School administrators and other school personnel who are involved in making health policy decisions should become familiar with this rule

and consider, in consultation with appropriate legal counsel, adopting the policies that it describes, including the development of an exposure control plan. Such an exposure control plan should contain a statement on providing hepatitis B vaccine to appropriate school staff (August 2001).

The Occupational Safety and Health Administration (OSHA) guidelines and the standard adopted by the Missouri Department of Health and Senior Services also requires:

Persons who, as part of their assigned occupational duties, may reasonably be expected to have contact with blood should be vaccinated with hepatitis B vaccine. Vaccination of all school staff is neither feasible nor necessary. However, certain staff are assigned duties which could place them at increased risk of infection from hepatitis B. These individuals should be provided, free of charge, three doses of hepatitis B vaccine. Such individuals include:

1. The person(s) assigned primary responsibility for providing first aid;
2. Special education/early childhood development personnel who may have contact with children infected with hepatitis B. These children may have special behavioral and/or medical problems which increase the likelihood of hepatitis B transmission; and
3. The person(s) assigned primary responsibility for cleaning up body fluid spills.

A person who has been offered hepatitis B vaccine but refuses to receive it should be required to sign a statement indicating the vaccine was offered but he/she chose not to be vaccinated.

School nurses (RNs and LPNs) licensed under Chapter 335, RSMo, are required, according to Section 191.694 RSMo, to adhere to standard precautions, including the appropriate use of handwashing, protective barriers, and care in the use and disposal of needles and other sharp instruments.

Procedures for Cleaning Spills of Blood or Other Body Fluids

1. Absorbent floor-sweeping material should be used to cover larger body fluid spills.
2. Wear sturdy, non-permeable gloves and other protective clothing as necessary.
3. Use disposable absorbent towels or tissues, along with soap and water, to clean the area of the spill as thoroughly as possible.
4. All surfaces that have been in contact with the body fluids should then be wiped with a disinfectant. Any EPA-approved disinfectant can be used. A 1:100 dilution of household bleach can also be used (this solution should not be mixed in advance because it loses its potency). After the disinfectant is applied, the surface should either be allowed to air dry, or else to remain wet for 10 minutes before being dried with a disposable towel or tissue.
5. If the gloves worn to clean up the spill are reusable rubber gloves, they should be washed with soap and running water prior to removal. Disposable gloves should be placed in an impermeable plastic bag. Regardless of the type of gloves used, care should be taken during glove removal to avoid contamination of the hands. However, whether or not any known contamination occurs, the hands should be thoroughly washed with soap and water after the gloves are removed.
6. If the person doing the clean up has any open skin lesions, preparations should be taken to avoid direct exposure of the lesions to the body fluids.
7. If direct skin exposure to body fluid accidentally occurs, the exposed area should be thoroughly washed with soap and water for at least 15 seconds.
8. It is necessary to keep one or more clean-up kits on hand for blood/body fluid spills. The cleanup kit should consist of the following items:

- Absorbent floor-sweeping material
- Liquid soap
- Disinfectant
- Small buckets
- Rubber or plastic gloves
- Disposable towels or tissues
- Impermeable plastic bags

All of these materials should be kept together in one or more central locations so that they are readily accessible.

CAUTION: Diluted bleach solutions, if utilized, should not be used for any other purpose than the cleanup described above. Mixing this solution with certain other chemicals can produce a toxic gas. Also, any EPA-approved disinfectant that is used should be diluted according to manufacturer's instructions. It is not appropriate or necessary to add more disinfectant than the directions indicate. Doing so will make the disinfectant more toxic, and could result in skin or lung damage to those individuals using it.

Missouri Department of Health and Senior Services
July 2005

Appendix C

Missouri School Improvement Standards on health education and communicable diseases

Resource Standards[2]

Elementary School

1.1.1. Each elementary student will receive regular instruction in reading, language arts, mathematics, science, social studies, comprehensive health (including tobacco, alcohol and other drug prevention and HIV/AIDS prevention education) and career awareness education.

Junior High/Middle School

1.2.2. Physical education is scheduled and taught to all students for a minimum of 3,000 minutes each year and health (including tobacco, alcohol and other drug abuse prevention education and HIV/AIDS prevention education) and safety education is scheduled and taught to all students for a minimum of 1,500 minutes each year.

High School

1.3 Each high school has a current minimum offering of at least 40.5 units of credit, with sufficient sections in each course to meet the needs of all students in grades 9–12 and the state high school graduation requirements. These courses are distributed as follows:

	MINIMUM STANDARD	DESIRABLE STANDARD
Health	0.5	1.0

(Includes tobacco, alcohol and other drug prevention and HIV/AIDS prevention education)

Process Standards[2]

8.11 The district has developed and implemented a program for school health services which includes goals and objectives, service activities, and an evaluation design.

1. The district has a written health services plan and health care services which include:

- goals and measurable objectives aligned with the CSIP and student performance data
- program evaluation criteria and procedures
- board-approved written policies on the administration of medication, contagious and infectious diseases, immunizations for school children, confidentiality of health records, and child-abuse reporting
- procedures for first aid and emergency care (including accident-reporting procedures and records of students served)
- procedures for maintaining up-to-date cumulative health records including immunization records and emergency contact information
- procedures for providing comprehensive health screenings, making referrals for identified health problems, and sharing information with parents/guardians
- procedures for monitoring students' chronic health problems and for developing strategies for addressing such problems to ensure individual students' academic progress

2. The health services plan and program is reviewed by a registered nurse and/or a consulting physician annually.

3. Program improvement strategies have been identified and implemented.

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Missouri School Health Profiles 1994-2004

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